PCT

WORLD INTELLECTUAL PROPERTY ORGANIZATION International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

60/093,202 17 July 1998 (17.07.98) US 60/098,262 28 August 1998 (28.08.98) US

(71) Applicant (for all designated States except US): THE GOV-ERNMENT OF THE UNITED STATES OF AMERICA, as represented by THE SECRETARY, DEPARTMENT OF HEALTH AND HUMAN SERVICES [-/US]; Centers for Disease Control and Prevention, Technology Transfer Office, Executive Park, Building 4, Suite 1103, Atlanta, GA 30329 (US).

(72) Inventors; and

(30) Priority Data:

- (75) Inventors/Applicants (for US only): SWITZER, William, M. [US/US]; 820 Stephenson Ridge, Stone Mountain, GA 30087 (US). HENEINE, Walid [LB/US]; 2001 Hollidon Road, Decatur, GA 30033 (US). VEDAPURI, Shanmugam [IN/US]; 2077 Tallapoosa Drive, Duluth, GA 30097 (US).
- (74) Agents: GREENE, Jamie, L. et al.; Jones & Askew, LLP, 2400 Monarch Tower, 3424 Peachtree Road, N.E., Atlanta, GA 30326 (US).

BI) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published

With international search report.

(54) Title: METHODS AND DEVICES FOR DETECTION OF XENOGENEIC GRAFT PERSISTENCE AND INFECTIOUS AGENTS

(57) Abstract

Compositions, methods and diagnostic devices for monitoring graft integrity in xenotransplantation and for detecting infectious agents transmitted by the xenograft are described. In particular, the compositions, methods and devices are useful for determining porcine xenograft integrity and persistence and can detect the presence of PERV (porcine endogenous retrovirus) in a biological sample. The compositions, methods and devices are useful for determining or monitoring graft survival and rejection in recipients of xenografts and are useful for detecting the presence of pig cell and PERV infection in a xenotransplant recipient or donor. In addition, the compositions, methods and devices are useful for screening therapeutic products to be administered to humans to ensure that the products are free of pig cells, and thus free of PERV contamination, prior to administration.

The remaining pages of this document are provided in electronic format on the attached compact disc.

Full paper copies will be provided upon request by the Examiner.